To: CN=Rick Wilkin/OU=ADA/O=USEPA/C=US@EPA[]
Cc: CN=Dominic Digiulio/OU=ADA/O=USEPA/C=US@EPA;CN=Holly Ferguson/OU=CI/O=USEPA/C=US@EPA;CN=Lauren Drees/OU=CI/O=USEPA/C=US@EPA;CN=David Jewett/OU=ADA/O=USEPA/C=US@EPA[]; N=Holly Ferguson/OU=CI/O=USEPA/C=US@EPA;CN=Lauren Drees/OU=CI/O=USEPA/C=US@EPA;CN=David Jewett/OU=ADA/O=USEPA/C=US@EPA[]; N=Lauren Drees/OU=CI/O=USEPA/C=US@EPA;CN=David Jewett/OU=ADA/O=USEPA/C=US@EPA[]; N=David Jewett/OU=ADA/O=USEPA/C=US@EPA[]
Bcc: []
From: CN=Steve Vandegrift/OU=ADA/O=USEPA/C=US
Sent: Tue 7/24/2012 3:44:43 PM
Subject: Fw: Pavillion Phase V ADQ-NERL Las Vegas Lab results follow-up

Rick-

Based on the information provided by the Las Vegas lab, the following data flagging should be done:

1. Holding time:
Flag the alkylphenol data for the following samples with J5 for exceeding the 30 day holding time prior to extraction: EB1, PGDW20-0412, PGDW20d-0412, EPAMW02-0412-1. The J5 flags applied to acrylamide should be removed.

2. Acrylamide:
Flag the acrylamide data for the following samples with J2 for lack of matrix spikes or laboratory fortified blanks: FB1, EB1, PGDW20-0412, PGDW20d-0412, EPAMW02-0412-1, PGDW23-0412, PGDW30-0412, FB2, EB2, and PGDW05-0412.

3. Alkylphenols:
Based on the information provided in the email below, the use of R flags should be re-evaluated.

Flag both the nonylphenol (NP) and octylphenol (OP) data for the following samples with J2 for lack of matrix spikes or laboratory fortified blanks: PGDW20-0412, PGDW20d-0412, EPAMW01-0412-7, EPAMW02-0412-1, and EB2.

OP: All spikes within acceptance limits, so no additional flagging required.

NP: For the matrix spikes, 4 out of 6 were low. For the laboratory fortified blanks, one was low, one was extremely high, which may be a spiking error. We are waiting to hear from the lab on this one high recovery. But based on the data presented, the ones not flagged J2 (as described above) should be flagged K2.

Sample EPAMW02-0412-2 should be flagged J2 for both OP and NP due to lack of surrogate spiking (in report narrative).

Also be sure to review any impacts to the NP data from the EBs or FBs and flag accordingly. (EB and FB for OP were all <0.05 ug/L.)

Steve

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----- Forwarded by Steve Vandegrift/ADA/USEPA/US on 07/24/2012 09:53 AM -----

From: Rick Wilkin/ADA/USEPA/US
To: Patrick DeArmond/LV/USEPA/US@EPA
Cc: Steve Vandegrift/ADA/USEPA/US@EPA
Date: 07/24/2012 08:06 AM
Subject: Fw: Pavillion Phase V ADQ-NERL Las Vegas Lab results follow-up

Hi Patrick - thanks for the quick response. Will let you know if any other follow up is needed.

Rick

----- Forwarded by Rick Wilkin/ADA/USEPA/US on 07/24/2012 08:04 AM -----

From: Patrick DeArmond/LV/USEPA/US
To: Rick Wilkin/ADA/USEPA/US@EPA
Date: 07/23/2012 06:08 PM
Subject: Re: Fw: Pavillion Phase V ADQ-NERL Las Vegas Lab results follow-up

Hi Rick,

Sorry, these questions were probably a result of me not providing the adequate information. Thanks for your patience, I know you guys are under a lot of pressure.

See answers below in red.

If you need anything else, please let me know, I'll provide it as soon as possible.

Patrick D. DeArmond
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From: Rick Wilkin/ADA/USEPA/US
To: Patrick DeArmond/LV/USEPA/US@EPA
Cc: Steve Vandegrift/ADA/USEPA/US@EPA
Date: 07/23/2012 12:51 PM
Subject: Fw: Pavillion Phase V ADQ-NERL Las Vegas Lab results follow-up

Hello Patrick - a couple of questions came up during the ADQ process. Can you have a look at the questions below and get back to us? Thanks much.

Rick

==========
Richard T. Wilkin, Ph.D.
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----- Forwarded by Rick Wilkin/ADA/USEPA/US on 07/23/2012 02:49 PM -----

From: Steve Vandegrift/ADA/USEPA/US
To: Rick Wilkin/ADA/USEPA/US@EPA
Cc: Ann Keeley/ADA/USEPA/US@EPA, David Jewett/ADA/USEPA/US@EPA, Dominic Digiulio/ADA/USEPA/US@EPA, Holly Ferguson/CI/USEPA/US@EPA, Lauren Drees/CI/USEPA/US@EPA
Date: 07/23/2012 02:38 PM
Subject: Pavillion Phase V ADQ-NERL Las Vegas Lab results follow-up

Rick-

There are several items needing either clarification or additional information as a result of the recent ADQ on the Phase V data. These questions should be forwarded to the Las Vegas laboratory.

1. Holding Time: It was noted that several samples were re-extracted. These re-extractions were beyond the 30 day holding time. Were any data from these re-extractions used in the final data report? If so, which ones? Yes, certain samples were re-extracted for alkylphenol or AEO analysis. Halfway through MS analysis, the mass spec that we were previously using to analyze for alkylphenols needed repair and wasn't functional. Hence, we transferred method over to new MS, but also needed to re-extract some samples due to lack of sample. Re-extractions were performed on 5/21/12 and 6/1/12. On 5/21/12, the samples that were past 30 days were LV12WAT058 (equipblk1), LV12WAT060 (PGDW20-0412), and LV12WAT062 (PGDW20d-0412). Alkylphenol data from these samples were used in the final results. Then in the 6/1/12 re-extraction, performed because some analytes were very high concentrations, LV12WAT064 (EPAMW02-0412-1) alkylphenol data was used in the final results (prior extraction provided results that exceeded calibration range).
To summarize, equipblk1, PGDW20-0412, PGDW20d-0412, and EPAMW02-0412-1 alkylphenol data were used in final data report, and these had been re-extracted past 30 day hold time.

2. Acrylamide: It does not appear that a laboratory-fortified blank was analyzed with the batch on 5/1/2012, the QAPP specifies one is to be analyzed with each batch. I looked at the batch from 5/1/12, and it appears that that is correct, no LFB was analyzed with the 5/1/12 batch. I interpreted the "batch of samples" to refer to all the samples we received from your sampling trip. Because I can only extract 6 samples at a time with our Autotrace SPE Workstation, I often analyzed the extracted samples on the MS on different days. The batch did include a full initial calibration and continuing calibration verification and a number of sample matrix spikes. The concentration of the spike solution is not clear from the run logs (these were spiked at 500 ng per 500 mL, so final concentration of 1 ppb, I can provide missing pages from run logs if needed); therefore matrix spike recovery values are not known for those samples. The laboratory should provide spike recovery values for all spikes (LFB and matrix spike) for each analytical batch (5/1, 5/14, and 5/15) and identify which samples correspond to each spike recovery.
4/26/12 LFB spike recovery = 114%
5/1/12: LV12WAT060 = PGDW20-0412, spike recovery = 102%.
5/1/12: LV12WAT062 = PGDW20d-0412, spike recovery = 129%.
5/1/12: LV12WAT066 = PGDW23-0412, spike recovery = 126%.
5/1/12: LV12WAT073 = PGDW05-0412, spike recovery = 115%.
5/14/12 LFB spike recovery = 106%
5/14/12: LV12WAT088 = EPAMW02-0412 spike recovery = 115%
5/15/12: LFB spike recovery = 120%
5/15/12 LV12WAT105 = Riverton WY truck water spike recovery = 118%

3. Alkylphenols. (a) Spike recoveries are listed in a column but it is not apparent which samples they are associated with (LFB or matrix spike). The laboratory should identify which samples correspond to each spike recovery.

For nonylphenol:
LFB 5/21/12: 63.5%
LV12WAT060 (PGDW20-0412) spike 5/21/12: 69.2%
LV12WAT062 (PGDW20d-0412) spike 5/21/12: 62.8%
LV12WAT060 (PGDW20-0412) spike 4/25/12: 57.6%
LV12WAT062 (PGDW20d-0412) spike 4/25/12: 70.9%
LV12WAT073 (PGDW05-0412) spike 4/25/12: 56%
LV12WAT105 (Riverton water) spike 5/11/12: 107%
LFB 4/20/12: 742%

For octylphenol:
LFB 5/21/12: 109%
LV12WAT060 (PGDW20-0412) spike 5/21/12: 116%
LV12WAT062 (PGDW20d-0412) spike 5/21/12: 120%
LV12WAT060 (PGDW20-0412) spike 4/25/12: 110%
LV12WAT062 (PGDW20d-0412) spike 4/25/12: 117%
LV12WAT073 (PGDW05-0412) spike 4/25/12: 105%
LV12WAT105 (Riverton water) spike 5/11/12: 126%
LFB 4/20/12: 127%

(b) It appears that the values for samples EPAMW02-0412-1 (both analytes) and octylphenol for sample EPAMW02-0412-2 are above the calibration range. Were these samples diluted and re-run to be within the calibration range?

The samples were quantitated using isotope dilution technique for alkylphenols, based on relative response between native and labeled compound. Diluting the samples would not change the ratio between native and isotope, therefore, EPAMW02-0412-1 was re-extracted on June 1, 2012 (only 50 mL was extracted instead of 500 mL). My student extracted all the samples and accidentally forgot to add labeled compound to the last EPAMW02-0412-2 sample, therefore, it could not be re-extracted one more time.

Steve

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